

Abstract

Methods and apparatus for generating at least one variable color lighting effect over at least a two-dimensional observation area. In various examples, at least first radiation having a first spectrum and second radiation having a second spectrum different than the first spectrum are generated from a plurality of LEDs. One or more geometric panels are disposed with respect to the LEDs so as to at least partially diffuse the first radiation and the second radiation to provide a mixed spectrum when both the first radiation and the second radiation are generated. A first intensity of the first radiation and a second intensity of the second radiation are independently controlled at a plurality of graduated intensities from a minimum intensity to a maximum intensity so as to generate a variety of dynamic lighting effects over one or more two-dimensional observations areas covered by the one or more geometric panels.